

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. Cancelled.

2. (Currently amended) Immobilization device, comprising according to claim 1, characterized in that it comprises: an osseous anchoring element (3) provided with a head (8) comprising having two vertical elastic walls (9,10) delimiting a central U shaped opening (11) whose bottom (12) has a part cylindrical profile, each elastic vertical wall (9,10) being separated from the bottom (12) of the central opening (11) by a vertical slot (50) giving a certain elasticity to each wall in a direction YY', said elastic vertical walls (9,10) comprising including respectively at each end a profile in the form of a hooking blade (14,15) disposed facing each other and on opposite sides of the central opening (11), said hooking blades (14,15) comprising including respectively in their upper portion ([a]) snap-in teeth tooth (19,20), and a blocking element (5) comprising a cylindrical seat (29), a screw-threaded bore (30) opening within the seat (29), a tightening screw (31) coacting with the screw-threaded bore (30) and lugs (33,34) which coact respectively with a tooth (19,20) secured to the elastic blades (14,15) a blocking element including a seat, a screw-threaded bore opening within the seat, a tightening screw coacting with the screw-threaded bore and lugs which coact respectively with said teeth, the blocking element having a lower surface including a seat having part cylindrical profile, and an upper surface including a screw-threaded bore opening within the seat and in which coacts a tightening screw, and lateral surfaces parallel two by two and of which at least two of the lateral surfaces are secured respectively to the lugs.

3. (Currently amended) Immobilization device according to claim 2 characterized in that wherein each elastic vertical wall (9,10) comprises on its internal surface and between the hooking blades (14,15) a part cylindrical vertical seat (51) having grooves (54) on each side.

4. (Currently amended) Immobilization device according to claim 2, wherein characterized in that the hooking blades (14,15) of the head (8) comprise respectively in their upper portion a tooth (19,20) whose the teeth have a hooking profile (40,41) is turned inwardly of the central opening (11).

5. (Currently amended) Immobilization device according to claim 4, wherein characterized in that each of the teeth tooth (19,20) comprises above its hooking portion (40,41) and in the direction of the opening (11) an inclined external profile (42,43) prolonged in the outward direction by a convexly rounded profile (44,45).

6. Cancelled

7. (Currently amended) Immobilization device according to claim 2, wherein the 6 characterized in that each lateral surface (27,28) disposed in a plane parallel to the axis XX' of the seat (29) comprises two lugs (33,34) are in the form of teeth comprising hooking portions (48,49) separated by a vertical seat (52) bordered laterally by ribs (53).

8. (Currently amended) Immobilization device according to claim 7, wherein 6-characterized in that the hooking portions (48,49) are closed opposite the lateral surfaces (25,26) by means of

the ~~a~~ corresponding one of the vertical ribs ~~rib~~ (53).

9. (Currently amended) Immobilization device according to claim 2, ~~wherein~~ 1, characterized in that it comprises: an osseous anchoring element (3) provided with a head (8) comprising two vertical walls (9, 10) delimiting a central opening (11) of U shape whose bottom (12) has a part cylindrical profile, each vertical wall includes (9, 10) being constituted by a central surface (13) bordered laterally and on each side by the elastic blades (14, 15) separated respectively from said central surface by vertical slots (16, 17), said elastic blades (14, 15) comprising respectively in their upper portion a snap-in tooth (19, 20) and a blocking element (5) comprising a seat (29) having a part cylindrical profile, a screw-threaded bore (30) opening within the seat (29), a tightening screw (31) coacting with the screw-threaded bore (30) and lugs (33, 34) which coact respectively with a tooth (19, 20) secured to the elastic blades (14, 15).

10. (Currently amended) Immobilization device according to claim 9, ~~characterized in that~~ wherein the central surface (13) of each vertical wall (9, 10) is pierced by a hole (18) opening within the central U shaped opening (11).

11. (Currently amended) Immobilization device according to claim 2, wherein the teeth have an 9, characterized in that the elastic blades (14, 15) of the head (8) comprise respectively in their upper portion a tooth (19, 20) whose external profile (21, 22) which is convexly rounded and inclined.

12. Cancelled

13. Cancelled

14. (Currently amended) Immobilization device according to claim 2, ~~wherein~~ 9, characterized in that the blocking element (5) has a first pair of opposite the lateral surfaces (25, 26) comprising respectively above the seat (29) an impression (32) adapted to coact with an instrument for the manipulation and emplacement of said blocking element (5) on the osseous anchoring element (3).

15. (Currently amended) Immobilization device according to claim 9, ~~wherein~~ characterized in that the blocking element (5) has a second pair of opposite the lateral surfaces (27, 28) which are each secured to two lugs (33, 34) disposed in the width of said blocking element and positioned in prolongation of the first pair of lateral surfaces each lateral surface (25, 26).

16. (Currently amended) Immobilization device according to claim 14, ~~wherein~~ 9, characterized in that each lug (33, 34) comprises respectively in its upper portion an inclined or beveled flat (35, 36) whose lower base is positioned in the plane containing each of said first pair of lateral surfaces (25, 26).

17. (Currently amended) Immobilization device according to claim 16, ~~wherein~~ 9, characterized in that each lug (33, 34) comprises respectively in its lower portion and opposite the inclined flats, (35, 36) a rounded profile (37, 38).

18. (Currently amended) Immobilization device according to claim 2, ~~wherein~~ 9, characterized in that the a distance [[d]] separating two of the lugs (33, 34) is less than that provided between two the teeth (19, 20) of a same vertical wall (9, 10) of the osseous anchoring element (3).

19. (Currently amended) Immobilization device according to claim 9, ~~characterized in that wherein~~ the pressure force ~~[[F]]~~ applied to the blocking element (5) permits by means of the lugs (33,34) and the vertical slots (16,17), ~~the~~ a lateral deformation of the elastic blades (14,15) in the direction of the central surface (13) of each wall (9,10) of the osseous anchoring element (3).

20. (Currently amended) Immobilization device ~~according to claim 1, characterized in that it comprises~~ comprising: an osseous anchoring element (3) provided with a head (8) comprising two truncated vertical walls (9,10) delimiting a central opening (11) of U shape whose bottom (12) has a part cylindrical profile, each vertical wall (9,10) being constituted by a central surface (13) bordered laterally and on each side by elastic blades (14,15) separated respectively from said central surface by vertical slots (16,17), said elastic blades (14,15) ~~comprising including~~ respectively in their upper portion a snap-in tooth (19,20) and a blocking element (5) comprising a seat (29) with part cylindrical profile, a screw-threaded bore (30) opening within said seat (29), a tightening screw (31) coaxing with the screw-threaded bore (30) and lugs (33,34) which coast respectively with a tooth (19,20) ~~secured to the elastic blades (14,15)~~, wherein the teeth have a hooking portion which is turned inwardly of the second opening and above the central surface of each vertical wall, and each of the teeth includes above its hooking portion and in the direction of the opening, an inclined external profile prolonged in the outward direction by a convexly curved profile.

21. (Currently amended) Immobilization device according to claim 20, ~~wherein~~ characterized in that the head (8) comprises two vertical walls (9,10) of truncated profile disposed one facing the other and in parallel planes so as to delimit a first central opening (11) of U shape carried by the a first axis XX' of the connecting rod (2) and whose bottom (12) has a part cylindrical profile, and a second opening (39) perpendicular to the first axis XX' and to the first opening (11).

22. (Currently amended) Immobilization device according to claim 21 ~~characterized in that wherein~~ the two perpendicular openings (11,39) permit delimiting at each point of the head (8) elastic blades (14,15) adapted to deform elastically under a pressure force ~~[[F]]~~.

23. Cancelled

24. Cancelled

25. (Currently amended) Immobilization device according to claim 20 ~~characterized in that wherein~~ the blocking element (5) comprises a lower surface (24) ~~comprising in a direction parallel to the axis XX'~~ a seat (29) having a part cylindrical profile so as to coast with the connecting rod (2), an upper surface (23) comprising at its middle a screw-threaded bore (30) opening within the seat (29) and in which coacts a tightening screw (31), and at least four lateral surfaces (25,26,27,28) parallel two by two and of which at least two (27,28) are secured respectively to two lugs (33,34) in the form of a tooth.

26. (Currently amended) Immobilization device according to claim 25 ~~characterized in that wherein~~ each lug (33,34) comprises a hooking portion (48,49) positioned retracted and spaced at a certain distance d1 from the lateral surfaces and opposite two of the lateral surfaces (25,26) of the blocking element (5).

27. (New) An immobilization device of a rachidian implant for blocking in rotation and translation a connecting rod of the implant, the immobilization device comprising:

an osseous anchor having an anchoring portion and a head adjacent the anchoring portion, the head having a U-shaped surface configured to receive the connecting rod, and a pair of vertical walls disposed facing each other in parallel planes on opposite sides of the U-shaped surface each having a tooth defined thereon, with at least one slot being provided adjacent each of the vertical walls to enable the vertical walls to deform relative to the U-shaped surface; and

a blocking element having an upper surface, a lower surface configured to provide a seat having a part cylindrical profile configured to receive the connecting rod, a threaded bore extending between the upper surface and the lower surface configured to receive a threaded screw, and a pair of lateral surfaces located above the seat and each having an outwardly extending lug with an inclined flat;

wherein the blocking element is positioned above the head such that the lugs bear against portions of the vertical walls, and a pressure force is applied to the blocking element such that the lugs contact the vertical walls and deform the walls away from the U-shaped opening to enable the lugs to become seated within the teeth of the vertical walls and to remain seated in the teeth when the force is removed, with the seat bearing against an upper portion of the rod, and wherein the connecting rod is immobilized by the threaded screw being threaded into the threaded bore and into contact with the rod.